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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,129	12/11/2003	Tom McBeath	P8700	1899

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CENTRAL COAST PATENT AGENCY
PO BOX 187
AROMAS, CA 95004

EXAMINER

DUONG, FRANK

ART UNIT PAPER NUMBER

2666

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,129

Applicant(s)

MCBEATH, TOM

Examiner

Frank Duong

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-21 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is a response to communications dated 12/11/03. Claims 1-21 are pending in the application.

Information Disclosure Statement

2. The information disclosure statement filed 01/27/04 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu (Patent Application Publication 2003/0115368).

Regarding **claim 1**, in accordance with Wu reference entirety, Wu shows a fault-testing node (Fig. 3) for a connectionless data link comprising:

at least two opposing communication ports (*Fig. 3; elements 463 and 464*);

a soft switch for controlling port-to-port data flow through the device (*Fig. 3*;

element 461); and

an instance of software for modifying header information associated with data units (*Fig. 3; element 462*); wherein one or more port-to-port data flow paths are switched by activating the soft switch to loop incoming data units back to the sender of the data units through the device, and wherein the instance of software reverses the order of source and destination addresses of data units to insure acceptance of looped data units at the sender station (*page 2, left col., paragraph [0015]*) .

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Wu further shows wherein the connectionless data link is an Ethernet data link (*Fig. 3; element 463*), the data units are Ethernet frames, and the source and destination addresses are MAC addresses (*Fig. 6*) (*page 2, left col., paragraph [0015]*).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales discussed above), Wu further shows wherein the connectionless data link is an IP data link (*Fig. 3; element 463*), the data units are IP data packets, and the source and destination addresses are IP addresses (*Fig. 6*) (*page 2, left col., paragraphs [0014]-[0015]*).

Regarding **claim 5**, in addition to features recited in base claim 1 (see rationales discussed above), Wu further shows two operating modes, a loop-back mode (loop-back operation) and a pass-through mode (normal operation) (*page 2, left col., paragraph [0014]*).

Regarding **claim 6**, in addition to features recited in base claim 1 (see rationales

discussed above), Wu further shows an array of resident fault testing applications (*page 2, paragraph [0014], Wu discloses Ethernet control circuit 461 is implemented as FPGA or ASI acting to perform loopback test, packet generation and packet reply*) and a logging component to create activity and error logs during testing and during normal operation (*page 2, paragraph [0015], Wu disclose network management system in central office 44 analyzes the reply packet to determine where the fault is. It is inherent the activity log is in the network management system's database to record the test results*).

Regarding **claim 7**, in addition to features recited in base claim 1 (see rationales discussed above), Wu further shows wherein loop-back tests performed include returning data for number of bytes sent or received over the link for a specified period (*page 2, paragraph [0015] continues to paragraph [0017], Wu discusses various level of loopback tests to include the line is faulty if there is no reply after a period of time has lapsed*).

Regarding **claim 8**, in addition to features recited in base claim 1 (see rationales discussed above), Wu further shows wherein intrusive tests are performed including Bit-Error-Rate-Testing, testing for throughput between the node and another on-line device, testing for packet delay between any two points on the link testing for jitter between any two point on the link, and testing for packet loss between any two points on the link (*see Fig. 7 and corresponding description at paragraphs [0018]-[0022]*).

Allowable Subject Matter

4. Claims 9-21 are allowed.

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, considered individually or in combination, fails to fairly show or suggest the novel and unobvious instance of software modifying the data unit header fields by copying the data from the first field to memory, copying the data from the second field and pasting the data into the first field, and then pasting the data from the memory into the second field, structurally and functionally interconnected with other limitations in a manner as recited in claims 4 and 8-21.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dariano (USP 5,173,896).

Emerson et al (USP 5,553,059).

Kumar et al (US P5,970,069).

Blain (USP 6,032,187).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Frank Duong', with a stylized, cursive script.

FRANK DUONG
PRIMARY EXAMINER

December 19, 2005